What is claimed is:

1. An MPEG data recorder comprising:

an interface means for receiving a data packet from a digital transmission line transmitting MPEG data in real time, and extracting a predetermined MPEG data from a received packet to output it as a data signal;

a data rate detector means for determining a data rate of MPEG data based on a valid data period, during which the data signal is outputted from the interface means; and

a recording mode selector means for selecting a recording mode based on the determined data rate.

- 2. The MPEG data recorder as claimed in claim 1, wherein, the interface means outputs a transmission control signal when the interface means outputs a data signal; and the data rate detector means determines a percentage occupied by the valid data period, by detecting the transmission control signal.
 - 3. The MPEG data recorder as claimed in claim 1,

wherein, the interface means outputs a data signal as an MPEG packet having a predetermined amount of data, and outputs a synchronizing signal in synchronization with the MPEG packet; and the data rate detector means counts the synchronizing signals outputted in a predetermined duration

for detection, and detects the data rate of MPEG data based on the counted value.

4. The MPEG data recorder as claimed in claim 1,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more valid data periods, and detects the data rate of MPEG data based on the added-up value.

The MPEG data recorder as claimed in claim 2,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more valid data periods, and detects the data rate of MPEG data based on the added-up value.

6. The MPEG data recorder as claimed in claim 3,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more valid data periods, and detects the data rate of MPEG data based on the added-up value.

7. The MPEG data recorder as claimed in claim 1,

wherein, the interface means is an IEEE 1394 interface unit, which performs an isochronous communication through an IEEE 1394 link, and the interface means extracts MPEG data of

a predetermined channel from the received packet.

8. The MPEG data recorder as claimed in claim 2,

wherein, the interface means is an IEEE 1394 interface unit, which performs an isochronous communication through an IEEE 1394 link, and the interface means extracts MPEG data of a predetermined channel from the received packet.

9. The MPEG data recorder as claimed in claim 3,

wherein, the interface means is an IEEE 1394 interface unit, which performs an isochronous communication through an IEEE 1394 link, and the interface means extracts MPEG data in a predetermined channel from the received packet.

10. The MPEG data recorder as claimed in claim 7,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more isochronous cycles, and detects the data rate of MPEG data based on the added-up value.

11. The MPEG data recorder as claimed in claim 8,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more isochronous cycles, and detects the data rate of MPEG data based on the added-up value.

12. The MPEG data recorder as claimed in claim 9,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more isochronous cycles, and detects the data rate of MPEG data based on the added-up value.